STUDIES IN AUSTRALIAN ENTOMOLOGY.

No. IX.

NEW SPECIES OF CARABIDÆ (WITH NOTES ON SOME PREVIOUSLY DESCRIBED SPECIES, AND SYNOPTIC LISTS OF SPECIES).

BY THOMAS G. SLOANE.

Tribe HARPALINI.

Genus GNATHAPHANUS.

First group of species with third interstice of elytra seriatepunctate.

Synoptic List of the Australian species of *Gnathaphanus* with the third interstice of the elytra seriate-punctate—*Gn. alternans*, Casteln., and *Gn. montanus*, Casteln., which are unknown to me in nature, being omitted.

- A. Elytra strongly sinuate on each side of apex.
 - b. Posterior angles of prothorax rounded off, colour black.....
 - bh. Posterior angles of prothorax marked, colour cupreous.
 - c. Posterior angles of prothorax obtuse at summit.....
 - cc. Posterior angles of prothorax rectangular.....
- AA. Elytra lightly sinuate on each side of apex.
 - D. Prothorax with sides lightly rounded and oblique posteriorly, basal angles wide but marked.
 - E. Third interstice of elytra only seriate-punctate.

Gn. heviceps, Macl.

Gn. pulcher, Dej.

Gn. rectangulus, Chaud.

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F. Prothorax wholly lavigate, or at most with only a few punctures in basal foveæ.

g. Prothorax with sides evidently narrowed to base, basal foveæ strongly impressed ..] Gn. latus, Sl.

Gn. riverina, Sl.

gg. Prothorax with sides hardly narrowed to base, basal foveæ wide and shallow

Gn. picipes, Macl.

FF. Prothorax rugulose-punctate on each side near base......

Gn. adelaida, Casteln.

EE. Third and fifth interstices of elytra seriate-punctate.

H. Size large; form wide, depressed (elytra green, legs black)

Gn. herbaceus, Sl.

HH. Size rather small; form narrow (elytra dark bronze, legs testaceous)|.....

Gn. impressipennis, Casteln.

DD. Prothorax rotundate on sides, basal angles rounded off (interstices of elytra convex).

i. Third interstice of elytra only seriate-punctate.....

Gn. froggatti Mael.

ii. Third, fifth and seventh interstices of elytra seriate-punctate

Gin. aridius, Blkb

Synonymy.

In order to render the table given above complete, it is necessary to deal with the synonymy of this group of species.

GN. PICIPES.

Harpalus picipes. Mael., Trans. Ent. Soc. N.S.W. 1864, i. p. 117; Diaphoromerus sexpunctatus, Macl., P.L.S.N.S.W. 1888, (2), iii. p. 466; D. sulcatulus, Macl., l.c. p. 467.

I have found from examination of the types in the Macleay Museum that Diaphoromerus sexpunctatus and D. sulcatulus are founded on the same species; and after comparing specimens taken by Mr. R. Helms on the Upper Ord River, Kimberley District, W.A., with a cotype of D. sulcatulus from the Macleay Museum,

I compared all these with a specimen from Queensland in my possession, which I had formerly identified as *Harpalus picipes* by comparison with Macleay's type, with the result that I am compelled to consider it is impossible to maintain them as distinct.

GN. ADELAID.E.

Harpalus adelaidæ, Casteln., Trans. Roy. Soc., Victoria, 1867, viii. p. 194; H. melbourneusis, Casteln., l.c. p. 183: H. parocusis, Casteln., l.c. p. 184: H. marginicollis, Casteln., l.c. p. 189: H. aneo-niteus, Macl., Trans. Ent. Soc. N.S.W. 1871, ii p. 102; H. angustatus, Macl., l.c., p. 102; H. gayndaheusis, Macl., l.c. p. 102; H. planipennis, Macl., l.c. p. 101; Mirosarus insularis, Bates, Cist. Ent. 1878, ii. p. 319.

I have examined the types of Macleay's species mentioned above and have arrived at the conclusion that they are conspecific with *Gn. adelaidæ*, Casteln, which appears to be found over the whole of Australia and also in Tasmania.

GN. IMPRESSIPENNIS.

Harpalus impressipennis, Casteln., Trans. Roy. Soc. Victoria, 1867, viii. p. 186; Diaphoromerus multipunctatus, † Macl., P.L.S. N.S.W. 1888 (2), iii. p. 467; Gn. darwini, † Blkb., l.c. p. 808.

A specimen of Diaphoromerus multipunctatus, Macl., (a cotype from the collection made by Mr. Froggatt for the late Sir William Macleay) is in my possession, and after comparing it with the description given by Baron Chaudoir Ann. Mus. Genov. 1878, xii. p. 510 of Gn. impressipeunis, Casteln., I feel little doubt but that it is a synonym of that species, while a comparison of it with Mr. Blackburn's description of Gn. darwini convinces me of the identity of that species with H. multipunctatis and therefore with Gn. impressipeunis.

GNATHAPHANUS LATUS, n.sp.

Broad, depressed; head of ordinary size; prothorax nitid, transverse, basal angles obtuse, lateral basal impressions strongly impressed and obsoletely punctate; elytra striate, third interstice

pluripunctate, apical curve lightly sinuate on each side; mentum with median tooth short, wide, obtuse. Head black; prothorax black, sometimes with a greenish tinge towards base; elytra blackish-green; under surface and legs piceous-black; antennæ ferruginous, second and third joints clouded with black; palpi reddish-piceous.

Head smooth, convex; frontal impressions well marked; clypeal suture distinct; eyes prominent; orbits a little swollen behind eyes. Prothorax subquadrate (4×5 mm.), widest about middle (at marginal setigerous puncture), depressed, roundly declivous on each side anteriorly; sides rounded, more strongly so anteriorly than posteriorly; anterior margin emarginate; base truncate (sub-emarginate in middle); anterior angles obtuse; basal angles widely obtuse; border narrow, wanting only on middle of anterior margin; median line fine. Elytra wider than prothorax (10×6.3 mm.), strongly striate; striole at base of second interstice elongate; interstices subnitid, minutely shagreened, hardly convex on dorsal surface, becoming convex towards apex (especially interstices 6-8), third with about seven widely placed punctures along its course. Length 15.7-17.3, breadth 5.7-6.4 mm.

Hab.: N.S. Wales—Wilcannia (R. Helms).

Allied to Gn. riverinæ, Sl., from which it differs conspicuously by its larger size, broader and more depressed form, interstices of elytra hardly convex on dorsal surface, sides of prothorax more ampliate in middle, etc.

GNATHAPHANUS HERBACEUS, n.sp.

Broad, depressed; head not large; prothorax shagreened, opaque near base, posterior angles obtuse; elytra with third and fifth interstices pluripunctate, apical curve lightly sinuate; mentum with median tooth feebly developed (short, wide, obtuse). Head greenish-black, prothorax blackish-green, elytra green; under surface shining black with faint greenish reflections in places; legs black; antennæ subpiceous, basal joint testaceous; palpi reddishpiceous.

Head of moderate size $(2 \times 2.2 \text{ mm.})$, smooth; frontal impressions small, light, clypeal suture distinct between them; eyes not prominent, convex; orbits a little convex behind eyes. Prothorax depressed, lightly declivous on sides anteriorly, explanate near basal angles, subquadrate (3.2 × 4.7 mm.), widest at marginal puncture (about middle), wider across base than apex; sides lightly rounded, lightly and obliquely narrowed posteriorly, strongly and roundly narrowed anteriorly; anterior margin deeply emarginate; base truncate; anterior angles prominent, obtuse; basal angles widely obtuse; border narrow, wanting only on middle of anterior margin; lateral basal foveæ lightly impressed, feebly punctate. Elytra depressed, wider than prothorax (8.5 × 5.5 mm.), subparallel on sides, very feebly sinuate on each side of apex; striæ linear, strongly impressed; striole at base of second interstice elongate; interstices subopaque, shagreened, depressed but becoming convex near apex (especially interstices 6-8), third and fifth with finely impressed widely placed punctures along their course. Length 14-14-5, breadth 5-5-5-8 mm.

Hab.: North Queensland (sent to me by Mr. C. French as from the Winton District, N.Q.).

A distinct species which may be readily distinguished from its nearest allies *Gn. latus*, Sl., and *Gn. riverinæ*, Sl., by its more depressed form, the pluripunctate fifth interstice of elytra, etc.

PSILONOTHUS, n.gen.

Head smooth, wide, convex; front not impressed; eyes small, distant from buccal fissure beneath. Mandibles short. Mentum deeply emarginate; sinus edentate, oblique on each side. Palpi: maxillary stout, two apical joints together oval and pointed; labial thick, penultimate joint short with two setæ in front, apical joint short, swollen. Metasternal episterna (without epimera) subquadrate. Facies robust, short, convex. Apterous; elytra connate. Anterior tarsi of 3 not dilatate or clothed beneath.

The position of this genus among the Australian Harpalini is near *Thenarotidius*. It is distinguished at once from *Notophilus* and allied genera by the eyes being distant from the buccal fissure

beneath; from *Thenarotidius* it differs by its shorter and more convex form, elytra more sinuate on each side of apex, short metasternal episterna, δ with anterior tarsi not clothed with spongiose tissue beneath; from Harplaner by its much smaller size, shorter form, prothorax without impressions on each side of base, short metasternal episterna, &c. The type is a very small glossy black beetle.

PSILONOTHUS OVALIS, n.sp.

Robust, convex, oval, lævigate. Black, nitid. Prothorax convex, transverse, cordate-quadrate, widest before middle; sides rounded anteriorly, obliquely and lightly narrowed posteriorly; apex truncate, angles obtuse; base truncate, angles obtuse; lateral basal impressions wanting; border entire, narrow and reflexed on sides. Elytra convex, smooth, oval; derm minutely punctate under a lens; humeral angles rounded; apical curve short, widely and lightly sinuate on each side; a few submarginal setigerous punctures behind humeral angles and towards apex. Length 2·5-2·8, breadth 1·1-1·3 mm.

Hab.: N.S. Wales—Grenfell, Junee, and Urana Districts; Victoria—Melbourne (Sloane).

Habits.—Found under logs and débris usually away from water, not uncommon.

Genus THENAROTES.

THENAROTES BICOLOR, n.sp.

Depressed, elongate-oval, nitid, subiridescent. Head black; prothorax reddish-testaceous; elytra bicolorous—black, with base (widely), apex (narrowly) and first interstice reddish; under surface piceous, becoming reddish at apex of abdomen and on episterna of prosternum; legs and two basal joints of antennæ pale testaceous; antennæ a little infuscate; labrum reddish.

Head convex, biimpressed between base of antennæ. Prothorax transverse (1×1.3 mm.), lightly narrowed to base; posterior angles obtuse; a wide, shallow, feebly punctate impression on each side

of base. Elytra fully striate (as in *Th. tasmanicus*, Bates); second interstice not striolate at base, third unipunctate behind the middle. Anterior tarsi of δ with joints 2-4 widely dilatate, intermediate tarsi with joints 2-4 lightly dilatate. Length 4.5, breadth 1.6 mm.

Hab.: Victoria—Mordialloc, near Melbourne (French).

Allied to *Th. tasmanicus*, Bates, from which it is readily differentiated by its black head. A species which seems certainly *Th. tasmanicus*, Bates, is widely distributed in South Eastern Australia, and comparing *Th. bicolor* with that species the following differences are noted apart from colour:—prothorax shorter, with posterior angles far less strongly marked and more obtuse, the basal puncturation much finer and less conspicuous. From *Th. australis*, Blkb., it offers the following evident differences:—size larger, form wider; anterior tarsi of 3 dilatate; elytra fully striate, the base reddish right across, the black discoidal areas extending to the margin at sides, &c.

THENAROTES TACHIOIDES, n.sp.

Subconvex; head short, lightly biimpressed between base of antennæ; mandibles short, hardly projecting beyond labrum; prothorax concavely impressed on each side of base, basal angles subrectangular; elytra fully striate, second interstice not striolate at base, third interstice unipunctate about apical third; posterior tarsi with first joint about as long as two succeeding joints together. Testaceous-brown, nitid; elytra more or less clouded with black; head black, antennæ infuscate; inflexed margin of elytra, labrum, palpi and basal joint of antennæ pale testaceous; under surface of body piccous, becoming testaceous towards apex (two apical ventral segments); prosternum brownish-testaceous.

Head wide, convex, a short, light, oblique impression on each side of front; eyes large, lightly inclosed at base. Prothorax transverse (0.7 \times 1 mm.), widest before middle, a little narrowed to base, wider across base than apex, widely and lightly convex on disc, depressed near base; margins explanate near basal angles; sides bordered, lightly rounded on anterior two-thirds, very lightly oblique posteriorly; anterior margin truncate, angles obtuse; base

truncate, angles obtusely rectangular; median line lightly impressed; lateral basal impressions strongly developed, widely foveiform. Elytra ovate $(2 \times 1.4 \text{ mm.})$, a little convex on disc, gently declivous to sides, more strongly so to apex; base truncate, humeral angles rounded; apical curve short; striæ lightly impressed, seventh distinct for whole length, eighth strongly impressed; interstices depressed. Length 3.2, breadth 1.4 mm.

Hab.: N.S. Wales—Mulwala (Sloane; three specimens under bark of trees where they had taken refuge from the flood waters of the Murray River, July 11th, 1894.)

The affinity of this small species is evidently to *Th. brunnicolor*, Sl., which it resembles in facies. Differences to which attention may be directed are its less robust form, smaller size, lighter colour; the prothorax with the sides less subsinuate near the basal angles (these less rectangular), the concave depression at each side of the base (in *Th. brunnicolor* the prothorax is flattened near each basal angle); the elytra less strongly striate and without a striole at base of second interstice. In none of my specimens are the anterior tarsi dilatate. It has a decided superficial resemblance to *Tachys transversicollis*, Macl.

THENAROTES MARGINATUS.

Harplaner marginatus, Macl., P.L.S.N.S.W. 1888, (2) iii. p. 472.

A specimen of *Harplaner marginatus*, Macl., a cotype from the Macleay Collection, is before me; it is a *Thenarotes*. The dilatation of the four anterior tarsi in the 3 is as in *Thenarotes tasmanicus*, Bates, except that the fourth joint of the anterior tarsi is deeply excised (almost <-shaped) and the corresponding joint of the intermediate tarsi a little more lightly so; the fourth joint of the posterior tarsi is entire.

Tribe CHLÆNIINI.

Genus ANATRICHIS.

Anatrichis sexstriatis, n.sp.

Short, oval. Labrum with anterior margin tripunctate; maxillary palpi with penultimate joint shorter than apical; pro-

thorax with upper surface densely and finely punctulate; elytra convex, simply striate, seventh stria wanting, striole at base of first interstice elongate, punctulate, seventh interstice not carinate near apex, humeral angles obtuse; 3 having anterior tarsi with four basal joints lightly dilatate and a little squamulose beneath. Black, elytra nitid; sides of prothorax piceous near basal angles; antennæ fuscous, basal joint piceous.

Head small, cylindrical behind eyes; clypeal suture distinct; front not punctate behind angles of clypeus; eyes hemispherical, prominent, hardly truncate behind; orbits not swollen and hardly inclosing eyes posteriorly. Prothorax transverse (1.9×2.9 mm.), widest about posterior third, greatly narrowed anteriorly; sides rounded; apex lightly emarginate, angles obtuse; base truncate, angles obtuse; basal impressions shallow, distinct. Elytra wide, ovate (5.2×3.6 mm.), convex; base truncate; apex widely rounded; strize strongly impressed, simple; interstices depressed, seventh and eighth confluent, ninth visible (and punctate) in marginal channel near base and apex, third bipunctate. Under surface shagreened; prosternum margined between coxe. Length 8, breadth 3.6 mm.

Hab.: N.S. Wales—Mulwala, Grenfell (Sloane; two specimens under a stick on the edge of a pool near Grenfell, August, 1899.)

According to Baron Chaudoir, the genus Anatrichis is chiefly distinguished by the nature of the puncturation of the upper surface, and differs from Oodes by several characters: the anterior margin of the ligula is lightly emarginate between the seta which are very far apart; the penultimate joint of the maxillary palps is shorter than the last; the apex of the maxilla is less hooked; there are only three punctures on the anterior margin of the labrum, the middle one is more or less broad, and bears from four to two seta; the form of dilatation is different in the anterior tarsi of the male.*

The total absence of the seventh elytral stria and the consequently wide seventh interstice is the characteristic feature of A.

^{*} Vide Monograph. Ann. Soc. Ent. Fr., 1882 (6), ii. p. 318.

sexstriatis; and this, together with the absence of any crenulation in the striæ, differentiate it thoroughly from the four species of the genus noticed by Chaudoir.

Note.—I have a second species of Anatrichis from Mulwala which agrees with Chaudoir's brief description of A. anstralasie, and which I believe to be that species; it differs from A. sexstriatis by its slightly smaller size, the front with a fine but distinct puncture on each side behind the angles of the clypeus, the elytra with all the strice present and strongly crenulate, the humeral angles subdentiform, the episterna of the metasternum punctulate, &c.

Tribe NOMIINI.

Genus Meonis.

MEONIS CONVEXUS, n.sp.

Elongate, convex, robust, levigate; head narrowed behind eyes; mandibles long, porrect, a setigerous puncture at anterior extremity of scrobe; prothorax pyriform, sides lightly sinuate posteriorly, basal angles obtuse; elytra oval, deeply 4-striate on each side of suture, fifth stria strongly impressed on apical declivity; metasternal episterna (with epimera) wide, much longer than broad. Black.

Head strongly transversely impressed behind vertex; occiput cylindrical; vertex convex; front and clypeus deeply and widely biimpressed; the space between the frontal concavities convex; eyes small, hemispherical, distant from buccal fissure—Sinus of mentum wide, truncate at bottom, oblique on sides. Labrum deeply emarginate, a large setigerous puncture on each side of emargination. Prothorax much wider than head, widest before middle, as long as broad (3.8 × 3.8 mm); sides rounded, narrowed to base, lightly sinuate near base; anterior margin truncate; angles obtuse, very near head: base truncate, a little rounded near each angle; lateral border thick, equal, lightly reflexed; marginal channel strongly impressed; median line very strongly impressed, sulciform, reaching base in full depth; lateral basal impressions strongly impressed, elongate, wide; spaces between

these impressions and border and median line convex. Elytra oval, considerably wider than elytra (7.8 × 4.8 mm.), convex; sides gently ampliate behind shoulders; base truncate; humeral angles rounded; apex sinuate on each side; four inner interstices convex, first narrow, third impunctate; lateral interstice placed in the deep marginal channel, narrow, punctate along its course. Length 14.5, breadth 4.8 mm.

Hab.: N. S. Wales—Blue Mountains (Springwood, Sloane; Wentworth Falls, Fletcher.)

A specimen from the Tweed River has been sent to me by Mr. A. Lea under the name of M. ater, Casteln.; from which M. convexus differs by its narrower and more convex form; the prothorax with the sides less ampliate at their widest part, and much less strongly sinuate posteriorly, the anterior angles projecting less from the sides of the neck, the base narrower with the angles less sharply rectangular, the lateral basal impressions shorter; the elytra proportionately narrower, the sides less ampliate behind the humeral angles and less rounded, the fifth stria impressed near apex; the metasternal episterna longer.

Note.—Meonis ovicollis, Macl., is not a member of this genus; I have examined the type and found it to be a species of Darodilia.

Genus Cyclothorax.

CYCLOTHORAX CORDICOLLIS, n.sp.

Robust; head narrow, lavigate; prothorax convex, cordate; elytra punctate-striate, base (narrowly), lateral and basal declivities smooth. Black, nitid; legs testaceous, tibiæ sometimes a little infuscate; antennæ infuscate, basal joint testaceous.

Head convex; front biimpressed, bicarinate on each side, inner carina extending backward to level with middle of eyes, wide anteriorly, very narrow posteriorly near anterior supra-orbital puncture; eyes hemispherical, prominent. Prothorax much wider than head, a little broader than long (1·2×1·3 mm.), widest before middle (at anterior marginal puncture), greatly narrowed to base; sides roundly ampliate, lightly sinuate just before base;

apex truncate, angles not marked, very near sides of head; base roundly truncate, angles marked, obtuse at summit; border narrow, hardly reflexed near basal angles; punctate basal area not depressed below plane of prothorax, not rugose; the punctures fine, separate (poriform); a light basal impression on each side; median line strongly impressed, not reaching base or apex. Elytra much wider than prothorax, truncate-oval $(3 \times 2 \text{ mm.})$, convex, lightly declivous to base; shoulders widely and evenly rounded; apical curve lightly sinuate on each side; six inner strice on each elytron well marked, rather strongly punctate, not reaching base, first entire, others successively shorter: striole at base of first interstice formed by a rather elongate row of punctures; submarginal stria strongly impressed; interstices flat, third bipunctate on disc, lateral interstice seriate-punctate, lateral border uniting with basal border and reaching peduncle. Under surface (excepting episterna of mesosternum) impunctate. Length 4-5, breadth 1:7-2 mm.

Hab.: Queensland—Brisbane (sent by Mr. Lea); N.S. Wales—Clarence River and Windsor (Lea), Grenfell, Junee, Urana, Mulwala (Sloane); Victoria—Ferntree Gully and Lilydale (Sloane).

Habits.—Found in damp situations near water, usually rare, but on July 11th, 1895, I found it very plentifully under sticks along the edge of a swamp about twenty miles north from the town of Urana.

This is the species I formerly regarded as *C. peryphoides*, Blkb.,* but Mr. Blackburn has informed me that it differs from that species. The only difference the description of *C. peryphoides* suggests to me is the darker colour of the legs in that species, a character that seems of little value, but probably *C. peryphoides* has the prothorax more strongly sinuate near the base, the basal angles more marked, and perhaps a coarser puncturation on the basal area.

Often C. cordicollis has the apex of the elytra testaceous, while the specimen I have from Lilydale is a little smaller, with the rows of punctures on the elytra finer, the seventh indicated by about seven punctures.

CYCLOTHORAX LATICOLLIS, n.sp.

Elliptical-oval, robust, convex; head lavigate, front feebly biimpressed; prothorax transverse, wider at base than apex, punctate near basal margin; elytra fully striate. Black, nitid, femora and antenne testaceous, tibiæ infuscate.

Head short, wide, convex: front with a shallow foveiform impression on each side between base of antennæ; eyes convex, not inclosed behind. Prothorax short, transverse (0.8×1.25 mm.), convex, hevigate (except just along basal margin), bordered (except on middle of base); sides rounded; anterior margin truncate, angles obtuse, near sides of head; base truncate on each side, middle lightly, widely and roundly produced backwards; basal angles widely obtuse; lateral margins a little explanate near basal angles and widened near anterior angles; border reflexed on sides, not reflexed at basal angles; basal impressions hardly marked, very shallow, short, wide, punctate; median line hardly impressed. Elytra ovate, a little wider than prothorax $(2.3 \times 1.3 \text{ mm.})$, convex; sides subparallel in middle, strongly rounded to base; humeral angles widely rounded; striæ entire, strongly punctate on disc; striole of first interstice short; third interstice bipunctate along course of third stria. Length 3.6, breadth 1:3 mm.

Hab.: N.S. Wales—Grenfell (Sloane; one specimen under the leaves of a felled sapling near Grenfell, August 17th, 1899.)

A thoroughly distinct species; its prothorax with the base decidedly wider than the apex and with wide basal angles differentiates it from all the species of the genus known to me; the basal punctate area of the prothorax, which is defined by a transverse impression, is very narrow, not lower than the rest of the surface, and does not extend near the basal angles on each side.

Tribe BEMBIDIINI.

Genus TACHYS.

TACHYS MULWALENSIS, n.sp.

Robust, oval. Clypeus large, lateral foveæ foveiform; prothorax transverse, wider across base than apex; elytra ovate, disc strongly 3-striate on each side of suture, lavigate towards sides, third stria strongly impressed on apical declivity and joining sutural stria at apex, submarginal stria obsolete on sides. Piceous': antennæ fuscous, basal joint testaceous.

Head wide, minutely shagreened; front obliquely biimpressed; space between frontal impressions convex; spaces between frontal impressions and eves narrow, raised and bearing a setigerous puncture above each eye; clypeal suture strongly impressed, straight, connecting the frontal impressions. thorax transverse, convex, lavigate, widest about middle, strongly and roundly narrowed anteriorly, lightly and roundly obliquely narrowed posteriorly; anterior angles obtuse, close to sides of head; base wide, truncate, angles rectangular; border reflexed, wide towards basal angles; lateral basal impressions well marked, wide; a deep transverse stria near base, this stria very near margin on each side, curving forward and punctate in middle; basal area in middle below plane of disc; posterior marginal setigerous puncture placed on border at each basal angle. Elytra truncate-oval, of same width at base as base of prothorax, convex (subdepressed on disc); sides ampliate behind humeral angles, rounded in middle; strize punctulate on disc, three inner ones entire, third deeply impressed, curving outward and inclosing a punctiform impression on apical declivity; fourth, fifth and sixth very lightly impressed; interstices depressed, third strongly bipunctate near third stria; lateral interstice developed and punctate near base and apex; border wide, reflexed. Length 2, breadth 1.3 mm.

Hab.: N.S. Wales—Mulwala (Sloane: plentiful under the bark of red gum trees standing in the flood waters of the Murray River on 22nd June, 1896.)

A very distinct species. Adopting the tabulation of the Australian species of Tachys which I have given in P.L.S.N.S.W. 1896, pp. 356-359, its place would be with those species which have the submarginal stria obsolete on the sides of the elytra; it would come nearest T. ovatus, Macl., from which it differs greatly by its larger size, less convex form, and the elytra more than unistriate on each side of suture.

Tribe FERONINI.

Genus Homalosoma.

Table of Species.

- Sinus of mentum parallel on sides.
 - 1. Form very short; prothorax subquadrate, strongly emarginate at base, margins widely explanate and acclivous; elytra short, very convex, interstices not carinate. third impunctate, humeral angles widely rounded; prosternum and mesosternum setigero-punctate...... H. curtum, Chaud.

- 2. Form wide and heavy; head very large; elytra with interstices not carinate, basal border prominent at humeral angles; prosternum setigero-punctate, mesosternum
 - a. Prothorax lightly narrowed to base, apex and base of same width, posterior angles obtuse H. crassiforme, Sl.

- aa. Prothorax strongly narrowed to base, wider across apex than base, posterior angles marked.
 - b. Head and prothorax splendid brassygreen... H. imperiale, Sl.

bb. Head black, prothorax only metallic towards margin...... H. brere, Motsch.

3. Elytra with at least seventh interstice carinate.

C. Mentum with median tooth rounded at apex; prothorax wide at base, posterior marginal puncture at each basal angle; elytra with basal border dentate at humeral angles, ninth interstice narrow and raised posteriorly; prosternum and mesosternum setigero-punctate (metasternum setigero-punctate at each side).

 $d. \ \ \, \text{Elytra convex on disc, colour black....} \left\{ \begin{aligned} H. \ \textit{renardi, Chaud.} \\ H. \ \textit{vigorsi, Gory.} \\ H. \ \textit{alternans, Sl.} \end{aligned} \right.$ dd. Elytra and prothorax flat on disc, very wide at bases and with margins greenish...... H. angulosum, Chaud. CC. Mentum with median tooth excised at apex; prothorax cordate, posterior marginal puncture on each side considerably before the base; prosternum and mesosternum glabrous. D. Prothorax sinuate on each side near base, posterior angles rectangular or subrectangular (except in H. porphyriacum, Sl.) E. Head long, genæ rounded to base of mandibles on each side. f. Posterior femora long, slender; anterior angles of protherax near to sides of head. y. Form elongate; prothorax gently narrowed to base; elytra long, subparallel on sides; ♀ with apex of abdomen plurisetose...... H. cyaneum, Casteln. gg. Prothorax strongly sinuateangustate to base; elytra obovate, sides strongly rounded; ? with apex of abdomen 4-setose... H. viridescens, Casteln. ff. Posterior femora swollen in middle; prothorax with anterior angles wide and distant from sides of head; elytra with third, fifth and seventh interstices carinate. h. Elytra with ninth interstice merged with marginal channel; posterior coxæ wide at outer posterior angle...... H. wilsoni, Casteln. hh. Elytra with ninth interstice raised posteriorly; posterior coxe with outer posterior angle prominent and

triangular H. nitidicolle, Casteln.

EE.	Head very large, short, convex;
	genæ projecting widely from
	base of mandibles on each side,
	truncate-oval on anterior mar-
	gin.

i. Elytra with basal border strongly dentate at humeral angles; head

and prothorax metallic purple. H. porphyriacum, Sl. ii. Elytra with basal border hardly

raised at humeral angles (these not dentate).

k. Colour black, elytra truncateoval.... II. cordatum, Chaud.

kk. Colour of upper surface

purple, elytra obovate..... H. superbum, Casteln.

DD. Prothorax with sides not sinuate before base, posterior angles obtuse; elytra with humeral angles rounded.

1. Elytra with third, fifth and seventh interstices carinate; black, prothorax and elytra margined with green..... H. cyaneocinctum, Boisd.

II. Elytra with third, fifth and seventh interstices costate a little stronger than others, elytra blackish-green..... H. atroviride, S!.

4. Form oval; prothorax cordate; elytra with interstices not carinate, third impunctate,

humeral angles rounded....... II. obscuripenne, Macl.

For notes on the species omitted from the table above, see P.L.S.N.S.W. 1894 (2), ix. p. 420; I have only now to add that H. marginiferum, Chaud., which was omitted from those notes, is very closely allied to II. viridescens, Casteln.; it is unknown to me in nature, but the description suggests that H. viridescens may be not more than a variety of *H. marginiferum*. In my former table (l.c., p. 418) too much reliance was placed on the form of the outer angle of the basal border of the elytra, a feature which is evidently of subordinate value in grouping the species.

Homalosoma crassiforme, n.sp.

Compact, heavy, robust; head large; prothorax very little narrowed to base, apex and base of equal width (8·3 mm.); elytra truncate-oval, subparallel on sides. Head, under surface, legs and antennæ black; prothorax nitid, black on disc, viridescent towards margin; elytra greenish-black, shagreened, summits of costæ nitid, lateral margin brassy-green.

Head large, convex, a little swollen behind and below eyes; front lightly, widely and shortly biimpressed; eyes small, convex. Prothorax subquadrate (7.5* × 10.5 mm.), widest about anterior fifth, lightly narrowed posteriorly; sides not sinuate towards base; apex widely, deeply and evenly emarginate; angles advanced, roundly obtuse; base emarginate in middle, angles obtuse, hardly marked; lateral margins widely upturned near base; lateral channel wide; median line lightly impressed; lateral basal impressions wide, well marked; space between basal impressions widely depressed along base; posterior marginal puncture placed just within the basal angle. Elytra wider than prothorax $(18.5 \times 12.5 \text{ mm.})$, hardly narrowed to base, convex, lightly declivous to sides, strongly but not abruptly declivous to apex; base wide; humeral angles rounded; basal border raised in a short subdentiform prominence at humeral angles; apex not sinuate on each side; striæ wide, shallow -a row of shallow separate punctures at bottom of each; striole at base of first interstice short, oblique; interstices 1-7 costate, subequal, ninth nitid, hardly distinct from margin, narrow and raised posteriorly, seriate-punctate; marginal channel wide; third interstice with about four punctures along Prosternum longitudinally impressed and setigeroits course. punctate between coxæ; mesosternum and metasternum glabrous. Ventral segments levigate, third, fourth and fifth setigero-punctate in middle near posterior margin. Posterior coxe contiguous. Length 35, breadth 12.5 mm.

Hab.: Queensland—Cairns (Coll. French).

^{*} This is the length of the prothorax in the middle; from anterior to posterior angle it is 9 mm.

A distinct species allied to *H. imperiale*, Sl., and *H. breve*, Motsch., but differing greatly from both these species in facies—prothorax less transverse, less strongly narrowed to base, as wide across base as apex, less rounded on sides; elytra less rounded on sides, etc. It may be noted that these three species are without a puncture at base of first interstice of elytra near origin of first stria.

Homalosoma porphyriacum, n.sp.

Q. Robust; head large, deeply biimpressed on front; prothorax subcordate; elytra oval, third, fifth and seventh interstices subcarinate, humeral angles dentate, inner side of margin seriate-punctate. Upper surface of head and prothorax shining metallic purple; elytra dark purple, opaque, summits of costæ nitid, lateral margins dark purple, shining; under surface black, shining—sides of head, prosternum and body with purple reflections; legs black.

Head large (8 × 8 mm.), swollen on each side behind eyes; front with a wide deep concavity on each side. Prothorax finely transversely striolate, subcordate, widest before middle $(6.8 \times 9.3 \text{ mm.})$; sides rounded on anterior two-thirds, strongly sinuate posteriorly; basal angles widely rounded, not marked; apex emarginate, angles obtuse, not prominent; base lightly and widely emarginate in middle; median line lightly impressed; lateral basal impressions wide, deep; posterior marginal puncture placed near margin considerably before basal angle. Elytra much wider than prothorax (18 × 12.5 mm.), widest a little behind middle, lightly convex, abrupt on sides from carina of seventh interstice; sides strongly rounded; apex widely and evenly rounded; strike finely punctate; third and fifth interstices strongly costate (the costa not reaching base); seventh carinate, second, fourth, sixth and eighth depressed, ninth merged with margin, third with four punctures on apical half; a setigerous puncture placed a little distance from base of first interstice on course of first stria; basal border forming a short prominent projection at each humeral Prosternum, mesosternum and metasternum glabrous. Abdomen plurisetose at apex. Length 35, breadth 12.5 mm.

Hab.: Queensland (given to me by Mr. C. French as coming from Budgery Mountain, S. Queensland).

This handsome species is allied to *H. superbum*, Casteln., which it resembles in facies; but differs from it by its larger size, the bright metallic colour of head and prothorax, prothorax with basal angles roundly obtuse, elytra with basal border dentate at humeral angles, etc.

Genus PTEROSTICHUS.

Pterostichus phylarchus, n.sp.

3. Upper surface aneous, prothorax more nitid and metallic than elytra; under surface, legs, labrum and mandibles shining black.

Robust, elongate-oval. Head convex; front wide, lightly and shortly biimpressed, swollen behind and below eyes; mentum with sides of sinus parallel. Prothorax truncate-cordate $(7 \times 9 \cdot 2 \text{ mm.})$, lateral impressions of base strongly impressed, elongate, wide. Elytra oval $(19 \times 12 \text{ mm.})$, convex; deeply striate; humeral angles rounded; interstices convex, third with five punctures along its course, fifth and seventh with three similar punctures, ninth seriate-punctate. Anterior tarsi with three basal joints dilatate and squamulose beneath. Length 34, breadth 12 mm.

Hab.: N.S. Wales—Bellinger River (Mr. J. H. Maiden).

Closely allied to Feronia regalis, Casteln., from which it differs by colour, more robust shape, eyes more prominent, elytra with basal border joining lateral border at humeral angle with hardly any projection, femora thick and more dilatate in middle. This species and Feronia regalis cannot properly be placed in the subgenus Notonomus on account of the shape of the sinus of the mentum for one reason: their place is evidently between Homalosoma and Notonomus and there seems no reason to separate-them from Pterostichus.

Genus SIMODONTUS.*

SIMODONTUS ELONGATUS, Chaudoir.

I identify as S. elongatus, Chaud., a species from Sydney of which the following is a brief description:—

Elongate-oval, depressed. Head small, eyes prominent. Prothorax subquadrate $(2 \times 2.55 \text{ mm})$; base (2.2 mm.) much wider than apex (1.5 mm.); sides lightly rounded; apex deeply emarginate; anterior angles prominent, obtuse; base lightly emarginate in middle; posterior angles obtuse, not marked; inner basal impression on each side of base narrow, elongate, lightly curved outwards, external impression well marked, short. Elytra very little wider than prothorax $(4.7 \times 2.8 \text{ mm}.)$, parallel on sides; humeral angles subangulate; striæ deep; interstices lightly convex, third 3-punctate along third stria; striole at base of second interstice elongate. Episterna of metasternum elongate. Black, nitid, subiridescent; antennæ, tibiæ and tarsi ferruginous. Length 8, breadth 2.8 mm.

Hab.: N.S. Wales—Botany near Sydney (Froggatt).

Differs from S. homomelanus, Germ., which it resembles, by its smaller head, more prominent eyes, prothorax more narrowed to apex, etc.

SIMODONTUS GRANDICEPS, n.sp.

3. Elliptical, depressed; head large; prothorax quadrate, of equal width at base and apex (2·2 mm.), external basal impression of each side short, wide. triangular; elytra truncate-oval, lightly striate; episterna of metasternum hardly longer than broad; posterior tarsi sulcate externally. Piceous-brown, nitid; legs, antennæ, mentum and parts of mouth ferruginous.

Head wide; front and clypeus lightly biimpressed; impressions wide and shallow on front; eyes large, inclosed behind; orbits well developed behind eyes and projecting from head with same

^{*} Vide P.L.S.N.S.W. 1889, (2), iv. pp. 732-737, and 1898, Pt. 3, pp. 480-484, for recent notices of the genus Simodontus.

convexity as eyes. Prothorax hardly broader than long $(2.5 \times 2.7 \text{ mm.})$, depressed, widest before middle; sides subparallel in middle, lightly rounded to anterior angles, more gradually narrowed posteriorly; apex widely emarginate; anterior angles widely obtuse; base lightly emarginate in middle; posterior angles roundly obtuse; lateral border wide; inner basal impression of each side well marked, lightly divergent; external impression wide, bearing near each posterior angle a setigerous puncture; median line lightly impressed. Elytra considerably wider than prothorax $(5.6 \times 3.4 \text{ mm.})$; sides lightly rounded; base truncate; humeral angles raised, subdentate; apex wide, shortly rounded; lateral border wide; interstices depressed, third punctate along course of third stria,* ninth seriate-punctate; striole at base of second interstice short, oblique, rising from a punctiform impression. Length 9.7, breadth 3.4 mm.

Hab.: Victoria—Gellibrand River, 30 miles west from C. Otway (Sloane).

This species seems to lead towards the genus *Prosopogmus*. It differs from *S. homomelanus*, Germ., by its head still larger, eyes more prominent; prothorax wider at apex, posterior angles more obtuse; elytra wider, more rounded on sides; episterna of metasternum shorter and wider.

SIMODONTUS MANDIBULARIS, n.sp.

Oval, robust, levigate; head large, mandibles thick and heavy, angulate on external edge; prothorax transverse, a little narrowed posteriorly, a little wider at base than apex; elytra truncate-cordate, convex, lightly striate, third interstice tripunctate along third stria, humeral angle subdentiform; episterna of metasternum subquadrate. Reddish-piceous-brown; legs and antennæ testaceous-piceous, femora paler.

Head wide, convex, ampliate behind base of mandibles; front with an obsolete round impression containing a fine puncture behind each angle of clypeus; clypeal suture well marked; eyes

^{*} There are four punctures, all placed along the course of the third stria, on the left elytron of the specimen before me.

convex, not prominent, inclosed posteriorly. Mandibles wide and heavy at base, strongly and obliquely declivous to labrum and clypeus, left overlapping right at apex; external edge strongly and roundly angulate about posterior third (thence oblique), arcuate at apex, right more strongly angulate than left at posterior third. Prothorax transverse (1.8×2.7 mm.), convex, declivous on each side between lateral basal impression and posterior angle, widest before middle, lightly narrowed to base; sides rounded, oblique posteriorly; apex hardly emarginate; anterior angles obtuse; base truncate; posterior angles marked but obtuse; margins hardly explanate near posterior angles; border wide; inner basal impression of each side strongly marked, short, a little divergent and attaining border posteriorly; external basal impression hardly marked—if present, shallow and round; median line fine. Elytra wide $(4.5 \times 3.3 \text{ mm.})$, convex, declivous to base on each side of peduncle, narrowed to base; sides rounded; base truncate; humeral angles strongly marked, hardly dentiform; striole at base of second interstice short (sometimes obsolescent), rising from a punctiform impression. Length 7-8, breadth 3·3-3·35 mm.

Hab.: N. S. Wales—Mulwala (Sloane); Victoria—Mallee District (C. French, Junr.).

This species is characterised by the peculiar shape of the mandibles; it is allied by its facies and short metasternal episterna to S. fortnumi, Casteln., and S. leai, Sl. From S. fortnumi it can be distinguished by the dentate humeral angles of the elytra, &c.; and from S. leai by its larger size, larger head with less prominent eyes, differently shaped mandibles, front not strongly impressed, elytra not so short and more narrowed to base. From S. eneipennis (unknown to me in nature) it seems sto differ by having the elytra much more ampliate behind the houlders. For differences from S. leviceps, Sl., a closely allied species, vide description of that species (p. 576).

SIMODONTUS LÆVICEPS, n.sp.

Oval, robust, lævigate; head wide, convex, without frontal impressions; prothorax transverse, wider at base than apex;

elytra truncate-cordate, finely striate, third interstice 3-punctate along course of third stria, humeral angles dentiform; episterna of metasternum short. Piceous-brown, femora and basal joints of antennæ testaceous.

Head smooth, clypeal suture distinct; eyes convex, prominent. Prothorax convex (1.6×2.3) , smooth; sides rounded, strongly roundly narrowed anteriorly, lightly obliquely so posteriorly (sometimes subsinuate just before base); apex lightly emarginate; anterior angles obtuse, not prominent; base truncate, angles subrectangular, obtuse at summit; lateral margins explanate near basal angles; lateral border equal, rather wide, reflexed; inner basal impressions short, linear; space on each side between these impressions and basal angles depressed; external basal impression often obsolete, if present shallow, foveiform; median line fine. Elytra short $(4 \times 3 \text{ mm.})$, convex, lightly declivous to base on each side of peduncle; sides rounded; base truncate; humeral angles shortly dentate; apical curve obsoletely sinuate on each side; striole at base of second interstice very short or obsolete, rising from a punctiform impression. Length 6-6-8, breadth 2-5-3 mm.

Hab.: N.S. Wales—Urana, Junee, Narrandera and Grenfell (Sloane).

Very closely allied to *S. mandibularis*, Sl., from which it differs by its smaller size; smaller head with mandibles less heavy and evenly rounded on outer side, eyes more prominent; posterior angles of prothorax less marked. It differs from *S. æneipennis*, Chaud., and *S. fortnumi*, Casteln., by the same features as *S. mandibularis*, Sl.: and from *S. leai*, Sl., by the frontal impressions obsolete; margin of prothorax narrower; posterior angles less obtuse; elytra not so short and broad, &c.

Genus PEDIOMORPHUS.

Table of Species.

- A. Prothorax not punctate near base, except in basal impressions.

PEDIOMORPHUS MACLEAYI, n.sp.

Depressed; head small, eyes prominent; prothorax transverse, subcordate, strongly rounded on sides; elytra finely punctate-striate. Reddish-brown.

Head small, smooth, convex, not narrowed behind eyes, feebly biimpressed between antennæ. Antennæ filiform, elongate; apical joint elongate, compressed-fusiform. Prothorax lævigate, widest a little before middle (1.6 × 2 mm.), emarginate at apex, truncate at base, depressed on disc, declivous to anterior angles; apex and base of about equal width; sides strongly rounded, strongly and roundly narrowed to apex, narrowed to base without sinuosity; anterior angles distant from sides of head, obtuse but marked; basal angles obtuse (not rounded); border narrow, reflexed, extending round anterior angles on each side; lateral channel very narrow; median line linear, well marked; lateral basal impressions well marked, short, punctulate; posterior marginal seta arising from a puncture placed in a slight dilatation of the border just before basal angle. Elytra suboval $(4.2 \times 2.7 \text{ mm.})$, parallel on middle of sides, widely rounded at humeral angles, widely depressed on disc, abruptly declivous to sides from sixth interstice; apex widely rounded, lightly sinuate on each sidestriæ finely and closely punctate; interstices depressed, ninth convex, punctate, the punctures interrupted in middle. Metaster; num punctate on each side; episterna of mesosternum and metasternum punctulate. Ventral segments rugulose-punctate. Length 6.7, breadth 2.7 mm.

Hab.: North-West Australia—King's Sound (Froggatt; specimens from Macleay Coll.).

Differs from *P. planiusculus*, Chaud., by its larger size, prothorax more strongly rounded on sides and more decidedly

narrowed to base, elytra reddish instead of piceous, antennæ longer and less compressed, the apical joint in particular longer.

Pediomorphus ruficollis, n.sp.

Depressed; prothorax broader than long, hardly cordate, punctulate on each side near base; elytra finely punctate-striate. Nitid; head black; prothorax testaceous-red (usually infuscate along base and apex); elytra piceous-black; antennæ, palpi, and legs testaceous; abdomen piceous-brown.

Head small, smooth, convex; very lightly biimpressed between antennæ; eyes convex, rather prominent; antennæ slender, filiform, apical joint short, compressed-fusiform. Prothorax levigate, widest a little before middle (1·15 × 1·35 mm.), emarginate at apex, truncate on base; apex and base of equal width; sides rounded on anterior two-thirds; roundly narrowed to apex, obliquely narrowed to base; anterior angles distant from head, obtuse; basal angles obtuse; border narrowly reflexed, extending round anterior angles on each side of apex; median line finely marked; lateral basal impressions wide, their whole area punctulate, the bottom forming a linear impression; posterior marginal setæ rising from a puncture placed in a slight dilatation of the border at each basal angle. Elytra parallel on sides $(3 \times 1.75 \text{ mm.})$, widely rounded at humeral angles, depressed on disc, abruptly roundly declivous to sides from fifth stria; apex rounded, lightly sinuate on each side; striæ linear, finely and closely punctate; interstices depressed. Metasternum punctate on each side; episternum of mesosternum and metasternum punctate. Ventral segments finely rugulose except in middle. Length 4.3-5, breadth 1.7-2 mm.

Hab.: N.S. Wales—Urana District (Sloane; plentiful sheltering under sticks and dried cow-dung in company with P. planiusculus, Chaud., near the edges of a swamp on the Colombo Plains Run, twenty miles north from the town of Urana, 11th July, 1895).

A distinct species differing from the others of the genus by its colour; also from *P. planiusculus* and *P. macleayi*, Sl., by its smaller size and punctate area on each side of base of prothorax,

and from *P. elongatus*, Sl., by its facies. In general appearance it much resembles *Thenarotes australis*, Blkb.

Genus DARODILIA.

The following is a Synoptic List of the species of *Darodilia*, omitting *D. castelnaui*, Macl., and *D. (Meonis) ovicollis*, Macl., of which I have no specimens for reference.

- A. Prothorax truncate at apex, anterior angles close to sides of head; elytra with one or more strize obsolete on apical declivity.
 - B. Elytra with three inner striæ impressed on disc, only first entire; size large.....
 - BB. Elytra with four inner striæ strongly impressed and entire; size small.
 - C. Prothorax as long as broad, lightly rounded on sides; prosternal episterna feebly rugulose.....
 - CC. Prothorax orbiculate, broader than long; prosternal episterna strongly rugulose.....
- AA. Prothorax emarginate at apex, anterior angles distant from sides of head; elytra fully striate at apex.
 - D. Head with frontal impressions foveate; prothorax rounded to basal angles on sides, two basal impressions on each side.....
 - DD. Head with front longitudinally biimpressed; prothorax subsimuate on sides just before basal angles, a single basal impression on each side

D. mandibularis, Casteln.

D. macilenta, Sl.

D. ruglsternus, Sl.

D. robusta, Sl.

D. emarginata, Sl.

Darodilia robusta, n.sp.

Q. Robust, oval, convex, levigate; head with front bifoveolate; prothorax suborbiculate; elytra with four inner striæ strongly impressed; ventral segments sulcate, punctulate on each side; mandibles prominent, decussating; labrum deeply emarginate. Black, nitid.

Head convex, widely and lightly transversely impressed between base of eyes, not swollen behind eyes; clypeal suture well marked, connecting the punctiform frontal foveæ; eyes prominent, hemispherical, lightly inclosed at base. Antennæ filiform, four basal joints cylindrical, others compressed. Prothorax transverse $(2.7 \times 3.2 \text{ mm.})$, widest about middle; sides strongly and evenly rounded; basal angles not marked; apex lightly emarginate, angles obtuse, a little marked; base a little rounded; border narrow; marginal channel fine; median line very lightly impressed; inner lateral impression of base deep, narrow, not long, external impression small, shallow, round (almost obsolete), divided from inner impression by a narrow raised space; posterior marginal setigerous puncture placed at extremity of marginal channel. Elytra oval $(6.2 \times 3.7 \text{ mm.})$; sides lightly rounded, much wider at base than base of prothorax; base truncate on each side of peduncle; shoulders rounded; apex lightly and widely sinuate on each side; four inner striæ strongly impressed, entire, fifth, sixth and seventh marked near apex (obsoletely indicated and minutely punctulate on sides in the two specimens before me), eighth strongly impressed; four inner interstices and lateral interstice convex for whole length, others convex on apical declivity; lateral interstice punctate, the punctures widely interrupted before basal Metasternal episterna elongate, deeply longitudinally sulcate near inner side. Length 10.5, breadth 3.7 mm.

Hab.: Queensland (given to me by Mr. C. French as from the Endeavour River).

A distinct species differentiated at once from all others except *D. emarginata*, Sl., by its wider and less depressed form. It differs from *D. emarginata* by its larger size; front not longitudinally biimpressed; prothorax more rounded on sides before basal angles; fifth and sixth strize of elytra not strongly impressed, etc. From *D. mandibularis*, Casteln., it is readily distinguished by its less elongate form and the elytra 4-striate on each side of suture.

Tribe LICININI.

Genus Physolesthus.

Physolestiius ruficollis, n.sp.

Depressed, lavigate; mentum edentate, labial palpi securiform. Elytra black, nitid; head black, mandibles reddish-piceous, labrum pale testaceous; prothorax reddish; abdomen piceous-black, shining; legs and palpi testaceous.

Head wide, depressed between eyes, not narrowed behind eyes; front with a ridge extending on each side from eyes to base of mandibles; eyes large, prominent. Prothorax transverse (1.6 × 2 mm.), depressed, widest before middle (at anterior marginal seta), wider between posterior than between anterior angles; sides lightly and roundly narrowed anteriorly; more lightly and obliquely so posteriorly; apex lightly emarginate; anterior angles wide, obtuse; base truncate in middle, sloping forward on each side; posterior angles obtuse, a little marked; lateral margins reflexed, explanate near posterior angles; a short, wide, strongly marked impression on each side of base; median line strongly impressed. Elytra depressed (4.5 × 3 mm.), lightly striate; interstices depressed, second wider and with an elongate striole near base, third finely bipunctate along course of second stria, ninth seriate-punctate. Length 7.5, breadth 3 mm.

Hab.: N. S. Wales--Mulwala (Sloane; a single specimen harbouring from flood waters of Murray River under loose bark of a red gum tree).

Differs from other species of the genus by its red prothorax.

Tribe ODACANTHINI.

Genus Eudalia.

Eudalia niger, n.sp.

Q. Upper surface setigero-punctate, under surface punctateglabrous. Head lævigate, sparsely setigero-punctate, widely dilatate across eyes, neck condyliform; prothorax subcylindrical longitudinally sulcate and setose on each side, punctate anteriorly —except on each side of disc; elytra wide, depressed (5.5×3.3 mm.), strongly punctate-striate, interstices levigate (not shagreened), sparingly seriate-setigerous. Black, nitid; trochanters and parts of mouth piceous; femora—excepting apex—pale testaceous; tibiæ black, a wide testaceous band in middle.

Head with eyes as broad as long; middle of front and vertex impunctate; front widely biimpressed. Prothorax longer than broad (1·7×1·5 mm.), convex, lightly ampliate on each side in middle; disc with a smooth space on each side anteriorly, lateral margin thick, convex (subcarinate); median line linear. Length 10, breadth 3·3 mm.

Hab.: N. S. Wales—Mulwala and Junee (Sloane; a single specimen at Mulwala, 26th June, 1896, under loose bark of a red gum tree, having taken refuge from flood water; and on the muddy bank of Houlaghan's Creek, fifteen miles north from the town of Junee, a single example under a stick).

Differs from *E. macleayi*, Bates, by its deep shining black colour, the tarsi and basal joints of antennæ black; head wider across the eyes and more strongly constricted posteriorly, less punctate; prothorax more elongate and more ampliate on sides, less closely punctate, elytra with interstices nitid, not shagreened, more sparingly setose (the setæ piceous, erect), striæ more deeply impressed and more strongly punctate, apical curve less shortly oblique on each side. The elytra have a wide transverse depression on each side of the disc a little before the apex.

Tribe LEBIINI.

Genus Sarothrocrepis.

SAROTHROCREPIS HUMERATUS, n.sp.

Depressed; prothorax transverse, posterior angles rectangular; elytra truncate on base, shoulders dentate. Bicolorous: head, antennæ and tibiæ ferruginous; prothorax testaceous; elytra black with a parallelogram-shaped plaga on basal half, basal border and

margins testaceous; under surface of prothorax, coxæ and femora pale testaceous; body testaceous, abdomen infuscate.

Head as in other species of the genus, a horseshoe-shaped impression between eyes. Prothorax transverse (1.65×2.5 mm.), much narrower at apex than base, widest before middle; disc convex; lateral margins explanate—especially posteriorly; sides rounded anteriorly, greatly narrowed to apex, hardly narrowed to base, sinuate before posterior angles; apex widely emarginate, base truncate on each side, produced roundly backwards in middle; posterior angles sharply rectangular. Elytra subconvex, considerably wider than prothorax (5.2×3.6 mm.), lightly and rather obliquely dilatate behind shoulders, subparallel on middle of sides; base truncate; humeral angles strongly and sharply marked, almost dentiform; striæ crenulate; margin narrow with edge narrowly reflexed. Length 7.5.8.5, breadth 3.6.3.8 mm.

Hab.: Victoria—Lilydale (Sloane; November).

Distinguished from the other species of the genus by the humeral angles of the elytra being raised and sharply rectangular; the pattern of the elytra differs conspicuously from that of *S. corticalis*, Fabr., by the black colour extending forward to the basal border along interstices 5-7, and along the first interstice to the basal striole.

Genus Dromius..

Dromius australiensis, n.sp.

Elongate, depressed. Black, subiridescent; elytra with a greenish tinge; legs testaceous (femora pallid, tibiæ darker); antennæ fuscous; under surface piceous, metasternum and posterior edge of ventral segments cloudy testaceous; head minutely shagreened.

Prothorax hardly wider than head with eyes; sides very lightly narrowed to base; posterior sinuosity obsolete; anterior angles obtuse; posterior angles marked, obtuse at summit. Elytra not attaining apex of abdomen, depressed, subparallel on sides, finely crenulate-striate; humeral angles widely rounded; apex roundly

truncate; second interstice with two fine setigerous punctures on disc. Length 3·3·3·5, breadth 1·1-1·2 mm.

Hab.: N.S. Wales—Mulwala, Junee and Grenfell (Sloane).

Compared with *Dromius yarra*, Blkb,, this species is smaller; the prothorax less obliquely truncate behind the posterior angles, and with basal lobe shorter; colour more coal-black, less iridescent.

Note.—Mr. A. M. Lea found a Dromius at Bridgetown, W.A., which seems to be D. australiensis.